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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/029,609	12/20/2001	Jason F. Hunzinger	09752-149001	4538

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SCOTT C. HARRIS
Fish & Richardson P.C.
Suite 500
4350 La Jolla Village Drive
San Diego, CA 92122

EXAMINER

CHOW, CHARLES CHIANG

ART UNIT

PAPER NUMBER

2684

DATE MAILED: 12/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/029,609

Applicant(s)

HUNZINGER, JASON F.

Examiner

Charles Chow

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3. 6) ☐ Other: _____

Detailed Action

1. Regarding to applicant's claim election for claims 18-22, 23-27, the following is the first office action according to the elected claims 18-27.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Spear (US 4,811,380) in view of Wicher et al. (US 5,608,643).

Regarding **claim 18**, Spear discloses a mobile station (Radio telephone unit 130, Fig. 1C) for use in wireless communication system (cellular radiotelephone system, Fig. 1A, col. 2, line 64; col. 2, line 58 to col. 3, line 18) for protecting dropped call, according to the determining means of the radio telephone 130 to request call reconnection (abstract; col. 1, lines 6-13; Fig. 4, reconnection 440).

Spear discloses a transceiver which transmits a connection request to the wireless comm. system (Fig. 1C, the receiver 144/transmitter 146 for transmitting of the call reconnection request, in abstract).

Spear discloses the microcomputer in supervisory unit 150 which determines the connection request fails (the radiotelephone comprising first means for determining the active call has

been lost, to indicate to system of the request for reconnection of the lost call; col. 9, line 46 to col. 10, line 8).

Spear discloses the signal strength parameter is monitored for identifying the reason of the lost call or failure, in col. 5, lines 50-65, Fig. 1C, 156).

Spear does not clearly indicate the number of times the failure occurs.

Wichter discloses transmitted message having a parameter indicating a number of times that the reason has occurred; storing the parameter indicating the number of time that the reason has occurred (for the cellular radio network 12, Fig. 1, which comprises the dispensing unit 10 for maintaining the stock food level in the Bins). The dispensing unit 10 transmits/ receives information from the system controller 14 (col. 3, lines 59 to col. 4, line 5).

Witcher teaches the dispensing unit 10 transmits communication-retry-counts and reason-code associated with the retried activity event to the controller 14, for the reconnection reasons (col. 8, lines 32-38). It is apparently obvious to include Wichter's transmitting of the retry count for establishing of the communication connection with the system controller 14, to Spear's system. By doing so, Spear's system could be upgraded with the information of the retried communication counts and reason codes, such that the system could efficiently determine the reconnection attempt situation based on the retry counts and reasons.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify and add Wichter's retry count for establishing the communication

link, to Spear, such that the system could efficiently determine the reconnection attempt situation based on the received retry counts and reason code.

3. Claims 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spear in view of Wicher, and further in view of Tiedemann Jr. et al. (US 5,999,816).

In the above, it does not clearly indicate the using said stored parameters.

Regarding **claim 19**, Tiedemann teaches the adapting system access parameters using stored parameters (the method and apparatus for mobile assisted handoff, title, abstract). The mobile station transmits parameter data having pilot search list for reattempting of establishing connection to the wireless system, and the search list is the stored parameter in the mobile station, such that the mobile could transmit the search offset list to the system for establishing connection, col. 19, lines 46-65). It is obviously clear to include Tiedemann's stored parameter data for establishing the connection, to Spears, such that the system would efficiently provide the service based upon the received parameter information. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify and add Tiedemann's stored parameter data for establishing the connection, to Spear as modified above, such that the system would efficiently provide the service based upon the received parameter information.

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Regarding **claim 20**, Wichter has considered the connection request from the dispensing unit with the connection parameter for the retry counts and reason code, as shown in claim 18 above.

Regarding **claim 21**, referring to examiner's comment in Tiedemann that the transceiver receives instruction based on the parameter data and to determine a time to reattempt the connection or waiting for a interval after the attempt/reattempt connection in shown in col. 19, lines 46-65).

4. Claims 22-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spear in view of Wicher, and further in view of Amin et al. (US 5,995,830).

In the above it does not clearly indicate the reasons of the previously failed reconnection. Amin teaches **claim 22**, a system having mobile switching center 110, base station 114, mobile telephone 116, Fig. 1, abstract, title, for processing dropped calls. The system determines the reason that call has dropped, and whether to attempt the reconnection, as shown in col. 7, lines 13-25; col. 8, lines 47-58). Amin system considers the reasons as shown in table 1; col. 3, lines 51-63, col. 5, lines 1-18, such as those reason groups for mobile travel outside area; handoff with insufficient channels; coverage hole; MSC error; interference. It is apparently obvious to include Amin's reasons for the failed connections to Spear as modified above, such that the system could accurately recover the connection based on the failure reasons. Therefore, it would have been obvious to one of ordinary skill in the

art at the time of invention to modify and add Amin connection lost listing as shown above, to Spear as modified above, such that the system could accurately recover the connection based on the failure reasons.

Regarding **claim 23**, referring to Amin, for the system comprising the node for determining of the cause of dropped link (abstract, Fig. 1). Amin considers the determination of the reconnection for certain number of attempts within period of time (col. lines 20-28). Amin considers the sending status message to non-dropped device, abstract; the status message including the reason for identifying the dropped connection (col. 2, lines 9-12, his claims 2, 11, and table 1-2). Regarding the transmitting of the first connection request, Spear is, inherently if not obvious, teaches the transmitting of the first connection request from the radiotelephone 130. Spear also has shown the second reconnection request for reconnection in abstract as shown above, and Wichter considers the parameter of the retry counts, reason code, as shown above.

Regarding **claim 24**, referring to examiner comment in claim Amin above for the number of time failed for particular parameter reason; and the failures parameter for reconnection in Table 1, and the included parameter having retry count, reason code from Wichter, for the next connection request.

Regarding **claim 25**, referring to examiner comment above for the receiving instruction for the next connection request from Amin (col. 8, lines 16-18, the sending a reconnection indication to the other device upon a successful reconnection).

Regarding **claim 26**, referring to examiner's comment in claim 22 above for the reason for the connection request failures group.

Regarding **claim 27**, referring to Amin for the modifying the aggressiveness of the connection request from Amin' analyzing a mobile assisted handoff list previously received from said wireless telephone (col. 8, lines 46-47).

Conclusion

5. In the above discussion, Spear discloses a mobile radio telephone unit 130 for use in cellular radiotelephone system, for protecting dropped call, according to the determining means of the radio telephone 130 to request call reconnection. Spear discloses a transceiver which transmit a connection request to the wireless comm. system as the receiver 144/transmitter 146 for transmitting of the call reconnection request. Spear discloses the microcomputer in supervisory unit 150 which determines the connection request fails, as the radiotelephone comprising first means for determining the active call has been lost, to indicate to system of the request for reconnection of the lost call. Spear discloses the parameter, signal strength, is monitored for identifying the reason of the lost call or failure. Witcher teaches the transmitting of the retry count and reason code for connection failure. Tiedemann teaches the stored parameter data for establishing the connection. Wilson teaches the new channel selection with the indication of success rate from the indicating bit error rate and threshold. Amin discloses the method and apparatus for processing dropped calls, the reconnection attempt, the mobile communication network. Amin teaches the system for determining of the reconnection and to reconnect for certain number of attempts within period of time. Amin

teaches the sending status message to non-dropped device; the status message includes the reason for the dropped connection; the reasons: outside coverage; insufficient channels; coverage hole; MSC error; interference, in Table 1-2.

6. The cited pertinent prior arts are listed below:

- A. US 2002/0082,032 A1, June 2002, Hunzinger (applicant) discloses the similar subject matter for the mobile station reconnection, based on the detailed reconnection information provided by the mobile station, to allow the infrastructure to adapt to the access parameters from mobile station, abstract; Fig. 2-4;). The mobile station also transmits reconnection attempt status such as number of attempts so far, and the reason for the reconnections, to the wireless infrastructure [0009].
- B. US 6,011,978, January 2000, Ault et al. discloses the decreasing the percentage of call failures; the maximum number of access; the access probe sequence for the access attempt (abstract, front figure, col. 9, lines 5-46; col. 9, line 60 to col. 10, line 23; col. 11, lines 50-65; col. 12, lines 4-7; col. 12, lines 42-44).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Chow whose telephone number is (703)-306-5615.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Hunter, can be reached at (703)-308-6732.

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Any response to this action should be mailed to:

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or faxed to: (703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or
proceeding should be directed to the Technology Center 2600 Customer Service Office
whose telephone number is (703) 306-0377.

Charles Chow

November 18, 2002.


DANIEL HUNTER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600